PoleVault® Systems

Complete audio/video solutions designed for classrooms, conference rooms, and meeting rooms

WINNER

Most Innovative Commercial Systems Installation Product
SCN Magazine, 2007

- Complete, centralized A/V switching system with stereo amplification
- Securely mounts and conceals switching and audio amplification components above the projector
- Uses CAT 5 type cable for quick and easy connections and low-cost installation
- Includes all necessary switching and mounting equipment – just add projector, sources, and screen
- Multiple upgrade options available
- Tamper-resistant, theft-deterrent design
- Simplifies setup; no programming required
- Network connectivity for Web-based monitoring and rapid problem resolution
- Auto projector shut-off saves power and extends lamp life

Extron® Electronics
www.extron.com

A Simpler A/V Solution

Extron PoleVault® Systems are easy-to-use, network-enabled, all-inclusive packages, making them ideal for schools, universities, and corporate environments. PoleVault Systems use economical twisted pair cable for transmitting signals and include network connectivity for Web-based asset management, monitoring and control.

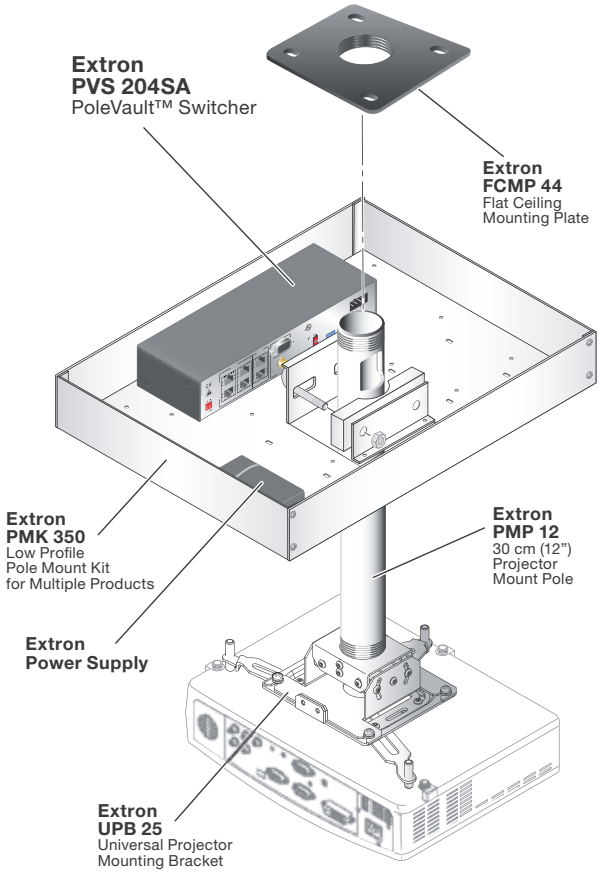
Complete A/V Technology Integration

When it comes to developing an A/V control system for meeting rooms and classrooms, administrators and system integrators have told us they have three primary concerns: the system should be easy to use, reliable, and sized properly to meet the needs of the room.

PoleVault Systems are designed to create a complete A/V technology integration solution that offers benefits for instructors, administrators, and students alike. Instructors will enjoy the simplicity of the system controller and enhanced sound quality. Students will benefit because technology that is easy to use gets used more often. Administrators will appreciate the ability to centrally monitor multiple systems using the network, as well as the expandability offered by the PoleVault switcher, which enables the addition of video and audio inputs beyond the capacity of the projector.

All of the products in the PoleVault Systems are designed and made by Extron and are optimized to work together, providing the most economical system solution. PoleVault Systems are predesigned for quick and easy installation, resulting in a significant reduction in design and installation costs.

A presenter can control the entire room's A/V system through the intuitive wall or lectern mounted Extron MediaLink™ Controller, which eliminates the need for a handheld IR projector remote and can significantly reduce calls for help. Overall, PoleVault Systems help organizations integrate A/V technology to the benefit of presenters and support staff alike.



With PoleVault Systems, switching and audio amplification equipment are securely mounted above the projector, away from tampering hands.

PoleVault System Benefits

Complete System

PoleVault Systems, whether standard or customized, streamline the design and procurement process, saving both time and money. Each system includes nearly 20 separate products, yet the entire system is ordered using a single part number. PoleVault Systems include all the necessary audio and video switching, audio amplification, system control, source connectivity, speakers, mounting hardware, and cabling for a complete classroom A/V solution. Certain items can be removed from the standard packages to meet system requirements. All that remains is to add the video projector, projection screen, and video sources.

Simplifies Installation While Saving on Space

In typical meeting room A/V systems, audio and video switching and amplification devices are mounted in a lectern or on a shelf or desktop. Too often, the equipment is unsecured, unsightly cables are visible, and valuable floor space is used. PoleVault Systems place the key products at the projector, so no equipment rack or tabletop space is required and cables are hidden away. Installation is simplified through the use of CAT 5 twisted pair cable, wall-mounted input signal transmitters, and easy-to-use projector mounting hardware.

To see how easy it is to install PoleVault Systems, view the Extron PoleVault System Installation video online at http://www.extron.com/pvinstall

Economical, Easy-to-Install Cables

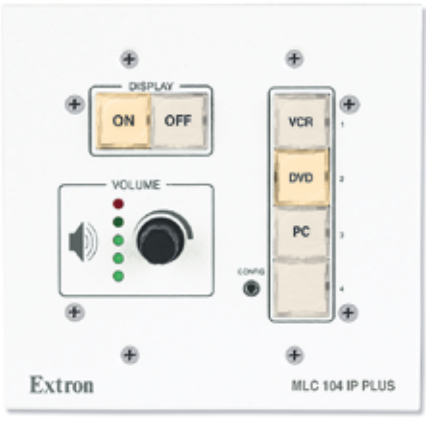
All PoleVault System video and audio input source signals between the wallplate input and switcher are routed along reliable and cost-effective CAT 5 twisted pair cable. Power is also sent to the input wallplates over CAT 5 cable.

Twisted pair cable is lighter, smaller, and more flexible than coaxial cable, so it is easier to route through walls and pull through small conduit, making it ideal for use in retrofitting existing rooms and for new construction. The connectors used with CAT 5 cable are also easier to attach to the cable and don't require highly skilled and costly technicians for installation. All these features add up to make PoleVault Systems more economical to purchase and install than those using standard coaxial cable for audio and video.

Easy To Control

The MLC 104 IP Plus MediaLink Controller included in standard PoleVault Systems is designed to simplify operation of the A/V system. With large, backlit buttons and a basic volume control knob, the controller is almost as easy to use as a light switch. Presenters with little or no training can learn to operate the system in a few minutes.

The standard controller employs only six buttons; two for ON/OFF control of the projector, and four source control buttons for selecting between a computer, VCR, DVD player, or any other source connected to the system. Removable button caps make it easy to label each button to clearly indicate its function; labels can be quickly changed and don't require programming or engraving. Controlling the volume of the presentation is as simple as turning the volume knob. For added functionality, optional controller models are available; all based on the same simple user interface.



The MediaLink Controller is easy to use.

PoleVault System Benefits

The MediaLink controller eliminates the need for multiple handheld IR remotes that can be lost or stolen. There are no batteries to replace and no confusing menus to memorize. When PoleVault Systems are installed in multiple rooms, presenters will confidently move from room to room when necessary, always encountering the same familiar control panel, no matter which projector is used.

The MLC 104 IP Plus MediaLink Controller features built-in IP Link® Ethernet control and is configurable using Extron's free Global Configurator software, which makes installation as simple as selecting choices from intuitive, drop-down menus instead of writing, compiling, and de-bugging complicated programming. The MLC104 IP Plus also supports GlobalViewer, Extron's free Web-based campus-wide asset management and remote control software application that provides a powerful, flexible way to manage, monitor, and control MediaLink products.

With a Web-based graphical user interface, you can control the system on a computer screen in the classroom.

Graphical User Interface Option

Technology enhanced meeting rooms provide presenters with new tools to inform and interact within the presentation environment. Many presenters prefer the flexibility of not only controlling the environment via an in-room controller mounted on a wall or lectern, but also from a control page on a computer monitor or wireless device. With PoleVault Systems, a presenter can control the projector, DVD player, VCR, screen, lights, and more from a colorful Web page on a laptop, desktop computer, or touchscreen monitor.

Extron offers two ways to create a custom graphical user interface, or GUI, for your installation. You can create your own using our free templates or let Extron software developers do the work for you with our economical GUI Customization Service.

FREE Web Graphical User Interface Templates: Do It Yourself

Our free Web User Interface development kit includes modifiable templates that can be downloaded from the Extron Web site. The kit includes code samples that you can use to create and deploy your own custom GUI. A detailed "getting started" guide is also included with instructions on modifying the template files and code, how basic communication is handled by the system, and loading and testing the base templates.

Web GUI Customization Service: Extron Does The Work For You

Ordering a custom Web GUI for your organization is as easy as contacting an Extron Customer Support Representative and describing what you need. For a small fee, Extron will take care of all the details.

Our software development team will create a mockup of your customized GUI. When you are completely satisfied with the design mockup, Extron software programmers will develop your custom GUI according to your exact specifications. The files will be fully tested using the same model of MLC 104 IP Plus controller used in your PoleVault system. When the testing is done, an Extron Application Engineer will send you your GUI files and work with you to install the GUI on your system.

Enhance the In-room Audio

Attempting to run the presentation audio through the projector might be seen as a money-saving option, but it results in poor quality sound and a low volume level. Projectors just don't have the speakers or amplification to produce quality sound and overcome noise in the room.

Standard PoleVault Systems include wall-mounted program speakers that can be mounted near the projection screen for directional stereo audio. For classrooms with suspended acoustical tile ceilings, you can substitute them with one or more pairs of ceiling speakers. Extron ceiling speakers are ideal for such installations and distribute the sound across the classroom.

Extron SI 3 surface mount speakers fill the room with high quality sound.

Together with the included PoleVault System speakers, the audio amplifier built into the PoleVault Switcher offers all the power necessary to deliver more sound level than needed for the small to medium size classroom. The PoleVault System switcher with integrated audio amplifier offers a robust and even distribution of audio throughout the room. Compatibility issues are eliminated since the amplifier, speakers, and audio inputs are all designed to work together.

Microphone Ready

The PoleVault Switcher is microphone ready. A wireless microphone receiver can be plugged directly into the PoleVault Switcher. Voice amplification in the meeting room provides several benefits. It reduces strain on the presenter's voice, makes it easier for attendees in any part of room to hear what is being said and, therefore, is likely to increase meeting participation.

Intelligent PA Sensing and Audio Muting

To ensure that important announcements are never missed, the PoleVault System is capable of sensing sound in the PA speakers. With the addition of an optional PPC 25 Priority Page Controller, any sound transmitted through the PA system will be detected immediately, and the MLC 104 IP Plus controller will receive a signal to mute the program audio. Once the announcement has ended, the program audio will be restored.

Flexible and Expandable

The PoleVault switcher at the heart of the system does all the work of signal routing external to the projector. This allows expansion of the system's A/V signal switching capability beyond what is available using projector switching alone. Switching between sources is much faster than using projector switching, because the PoleVault switcher eliminates lag time and delays. The audience will enjoy the presentation experience and presenters will enjoy presenting.

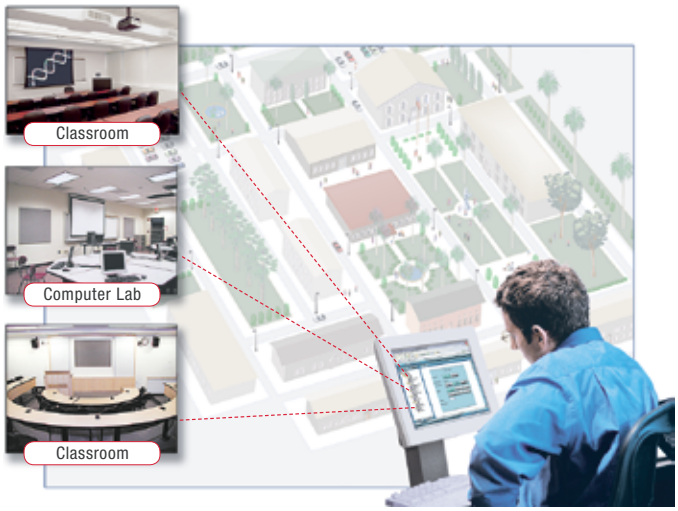
Standard PoleVault Systems accept two, three, or four source input signals. The four input system accepts two high resolution computer video signals and two standard resolution composite video signals. Adding additional computer video source inputs is as simple as substituting one or more of the standard wallplate inputs with a switchable two-input model.

PoleVault Systems allow for the integration of existing A/V sources, such as computers, DVD players, VCRs, document cameras, and more to support each of the different types of media used in the room. Because the PoleVault controller uses a combination of IR and serial control, the systems readily adapt to changes. If you upgrade your DVD players, for example, connections are easy to make and the system will operate exactly as before the upgrade. PoleVault Systems offer the flexibility and expandability to ensure they will meet tomorrow's needs as well as the needs of today.

Network Connectivity Helps Save Time and Money

The controller offered with standard PoleVault Systems features Extron's IP Link, a network integration technology we specifically engineered to meet the needs of professional A/V environments — from small meeting rooms to university applications.

Loss prevention with theft alerts: PoleVault System room controllers are always on and routinely poll their attached devices for status information. If any projector is physically disconnected from the network, the PoleVault System monitoring its status will know immediately. In such an event, it can send an e-mail message notifying security personnel of the possible theft. For fast action, e-mails can be sent to multiple addresses as well as cell phones and wireless PDAs.



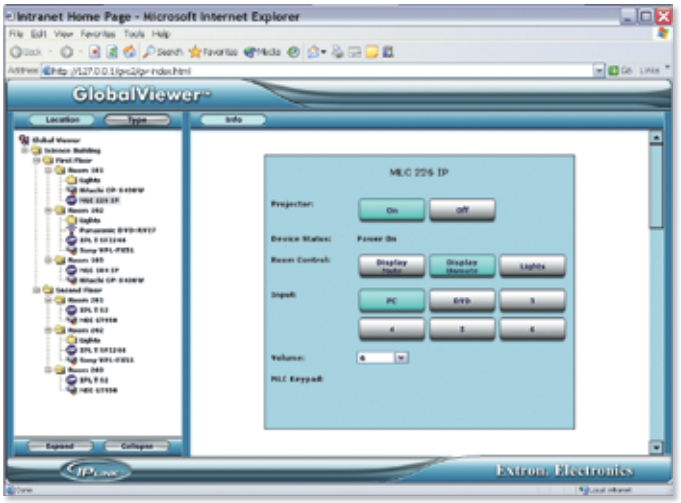
The PoleVault System's Global Viewer Web application can be used to monitor and control A/V systems in a single building or across an entire campus.

Reduced projector lamp and power costs: A projector that is left on over the weekend uses more power and lamp time than a week's worth of typical classroom use. Projector lamps are relatively expensive, ranging from $200 to $400 or more. An administrator may want to turn off all projectors every day at a preset time. She might also want to schedule the controller's front panel to lock out any unauthorized use after hours. With the controller's internal clock and the free Extron software, these and many other automated tasks are easy to set up.

Accessible from anywhere: Because they are Web-based, GlobalViewer Web pages stored on the MediaLink controller can be viewed using Internet Explorer® version 6.0 or higher from any computer with access to the network. GlobalViewer can also store and display information about connected devices like serial numbers, owner identification, maintenance history, and installed firmware versions. This centralized data can be collected and used to reduce maintenance costs and guide future purchasing decisions.

PoleVault System Benefits

Rapid problem resolution: You can troubleshoot PoleVault Systems remotely thanks to the real-time status of connected devices provided through the free GlobalViewer Web application. Information such as connection status, power state, and current source selection is displayed in a central location. For many connected devices, technicians can toggle power on or off, switch sources, control volume, and more without leaving their office. Many common problems can be resolved without a trip to where the equipment is located.



Remotely control all devices in the room with GlobalViewer's Room View screen.

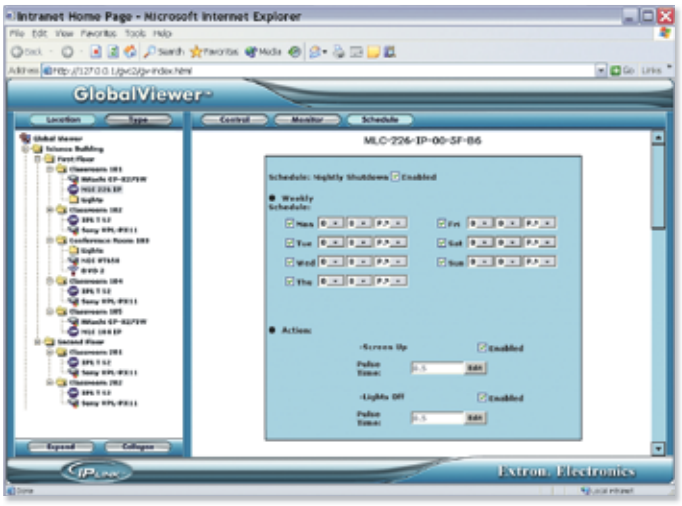
Avoid surprises through preventative maintenance: Projector lamps generally have a lifespan of around 2500 hours of usage. It can be very frustrating when a lamp reaches the end of its lifespan in the middle of a presentation. The networked PoleVault System controller keeps track of the projector's lamp usage and, thanks to the controller's e-mail capabilities, you can set it up to send an e-mail when a predetermined number of lamp hours have been reached. This will alert an administrator to purchase a new lamp before it burns out.

IP Link vs. Proprietary Projector Systems

We have found that most institutional installations do not have a single brand of projector in use across their entire campus. In addition, support personnel often need visibility to all of the components in an A/V system when working through trouble calls. Extron's IP Link technology is designed to network-enable every major brand of projector and unify them under a common support platform.

A combination of projectors, VCRs, DVD players, switchers, and other devices is the reality of most institutional installations. When we looked at the task of network enabling, monitoring, scheduling, and supporting projectors and their related equipment, we found IP Link and GlobalViewer to be the best and most flexible approach to meet this need.

The universal architecture of IP Link enabled devices allows facilities to support a mixture of different brands, models, and versions of projectors on the same network. Older and lower cost projectors do not have built-in network connectivity. IP link supports both network-enabled and non-network models. In addition to the projector, IP Link is designed to network-enable many other A/V system components.



At the Schedule screen, you can view and modify scheduled events and automated e-mail alerts.

Another factor to consider is the often expensive software needed to monitor, schedule, troubleshoot, and control the projectors. IP Link interface hardware works in conjunction with our free GlobalViewer Web-based asset management software. GlobalViewer software was created specifically to work with many makes and models of devices simultaneously.

Together with an IP Link-enabled MediaLink controller, the free GlobalViewer Web application provides a powerful, flexible way to monitor, schedule, and control all of the equipment in the A/V system.

Extron PoleVault System Design and Installation Support Program

Extron has assembled a dedicated team of system specialists with the technical expertise necessary to assist during every step of a PoleVault System project. From initial design and bill of material creation, Extron System Design and Support Specialists can provide your project planners or architects with assistance, including reseller referrals and preparation of submittals required by regulatory agencies.

Extron Satisfaction Guarantee

To underscore our commitment to quality, performance, and value, we offer our Satisfaction Guarantee. This means we will work diligently to resolve any issue you have with your purchase until you are completely satisfied. Extron employees are prepared to do whatever it takes to make certain that the entire process of doing business with us is a positive and professionally rewarding experience for you.

PoleVault Systems

EACH STANDARD SYSTEM INCLUDES THE FOLLOWING CORE COMPONENTS:

- One PVS 204SA Plus Four Input PoleVault Switcher with Integrated Audio Amplifier - not available separately
- One MLC 104 IP Plus MediaLink Controller with IP Link - White
- One Two-gang EWB - External Wall Box for mounting the controller - White
- One FCMP 44 Flat Ceiling Mounting Plate - Black
- One PMK 350 Low Profile Pole Mount Kit for Multiple Products - White
- One PMP 12, 30 cm (12") Projector Mounting Pole - White
- One UPB 25 Universal Projector Bracket - White
- One pair of SI 3 Compact Full Range Surface Mount Speakers - White
- Two lengths of SPK 18 Precut Speaker Cable - Plenum, 7.6 m (25')
- One MLC IR/RS-232 Projector Communication Cable - Plenum, 15 m (50')
- One MLC PW/RS-232/VC Power, Switcher Communications Cable - Plenum, 15 m (50')
- One AV RCA Male to Male RCA Cable - 1 m (3')
- One MVGA M-M 3 Male to Male VGA Cable - 1 m (3')
- One or two exclusive PoleVault A/V input wallplates - see below
- One or two lengths of CAT 5 twisted pair cable per wallplate - 15 m (50')

The only difference between the systems is the quantity and type of A/V input wallplates and video cables included - see Unique Features for each system.

PVS 202

Two Input PoleVault System

UNIQUE FEATURES

- Includes one two-input PVT RGB CV MK - PoleVault VGA and Composite Video with Stereo Audio Input - MK Wallplate

Model	Version Description	Part #
PVS 202	Two Input PoleVault System	42-130-03

The PVS 202 two-input PoleVault System has one VGA computer video input and one DVD/VCR input

PVS 302

Three Input PoleVault System

UNIQUE FEATURES

- Includes one two-input PVT RGB CV MK - PoleVault VGA and Composite Video with Stereo Audio Input - MK Wallplate
- Includes one PVT RGB MK - PoleVault VGA Computer Video with Stereo Audio Input - MK Wallplate
- Additional video input wall plate provides increased flexibility for adding an additional composite video source, such as a VCR

Model	Version Description	Part #
PVS 302	Three Input PoleVault System	42-131-03

The PVS 302 PoleVault System adds one VGA computer video input - three inputs total

PVS 402

Four Input PoleVault System

UNIQUE FEATURES

- Includes two two-input PVT RGB CV MK - PoleVault VGA and Composite Video with Stereo Audio Inputs - MK Wallplate
- Additional VGA input provides increased flexibility for adding an additional VGA source, such as a laptop or document camera

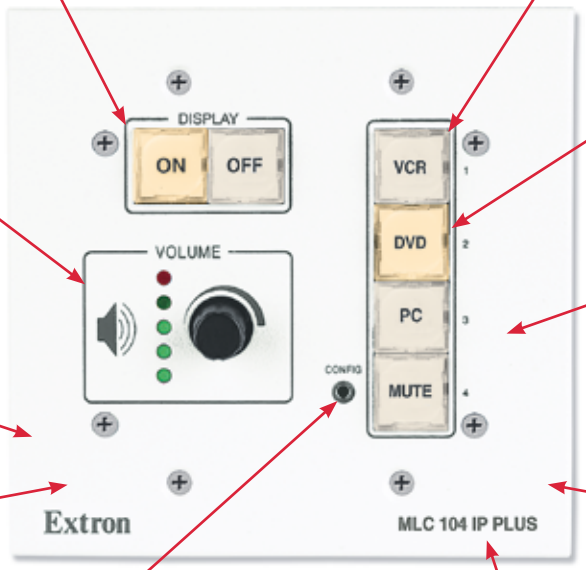
Model	Version Description	Part #
PVS 402	Four Input PoleVault System	42-132-03

The PVS 402 PoleVault System adds one VGA computer video and one DVD/VCR input - four inputs total

System Controller

MLC 104 IP PLUS MEDIALINK CONTROLLER

The Extron MLC 104 IP Plus MediaLink Controller with built-in IP Link Ethernet Control included in standard PoleVault Systems is an easy-to-use control panel. It is designed to simplify operation of the classroom A/V system and enables Web-based remote diagnostics, asset management, and support. When PoleVault Systems are installed in multiple meeting rooms, the MLC 104 IP Plus standardizes the control interface, making A/V systems simple to use for anyone.



Display ON/OFF
Two large, backlit buttons simplify display power operation and eliminate the need for a handheld display remote

Tri-color, Backlit Buttons
Helpful for presenters in low light environments

Volume Control
Five level status LEDs provide visual representation of the current volume setting

Removable Button Caps
Make it easy to label each button; labels can be changed quickly without programming or engraving.

Inactivity Timer for Display Shut-Off
Adjustable timer controls automatic shutdown to conserve energy and extend projector lamp life

Front Panel Security Lockout
Four-digit "PIN" prevents unauthorized system tampering

IP Link
Enables remote monitoring, control, and asset management

Variety of Mounting Options
Mounts virtually anywhere, such as a lectern, rack, or on a wall

Configuration Port
Simple, one-time setup with easy-to-use configuration software

Metal Faceplate
Available in black, white, or RAL9010 white

CONTROLLER FEATURES

- Bidirectional RS-232 port for universal display control
- Three digital I/O ports configurable as a digital input or digital output for sensors, switches, LEDs, and relays
- Dedicated IR Port for control of IR-controllable display devices and source equipment, such as VCRs and DVD players
- IR learning capability for capturing IR remote codes from a device's handheld remote control
- Adjustable timer controls automatic shutdown to preserve energy and extend projector lamp life
- Front panel security lockout prevents unauthorized tampering
- Tri-color, backlit, easy-to-label buttons
- Volume control knob with volume indication
- IP Link Ethernet monitoring and control
- Integral high performance Web server with 7.25 MB flash memory for storing device drivers, GlobalViewer, and custom user Web pages

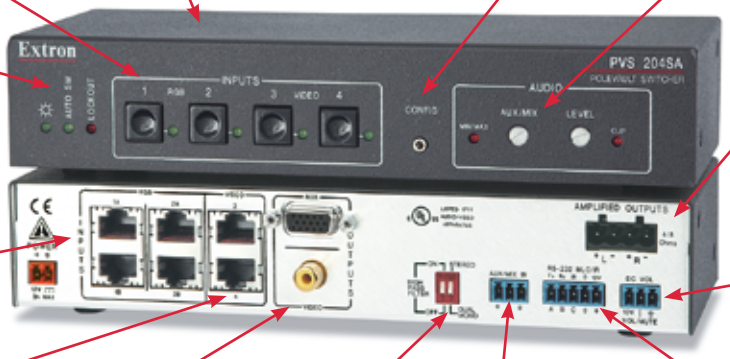
System Components

POLEVAULT SWITCHER

The heart of the MediaLink PoleVault System is the PVS 204SA Plus PoleVault Switcher. With four video inputs, autoswitching capabilities, and an integrated stereo audio amplifier, the PVS 204SA Plus allows the PoleVault System to be configured to meet the needs of most single projector A/V environments.

The PVS 204SA Plus accommodates up to two composite video signals and two high-resolution VGA computer video signals, all with stereo audio. Separate video outputs are provided for composite video and VGA video. The PVS 204SA Plus switcher can be controlled via IR or RS-232.

The PVS 204SA Plus also features an integrated 26 watt rms stereo audio amplifier capable of driving up to four Extron speakers and filling the room with full, rich sound. The integrated audio amplifier also features optional remote control of input selection and volume control, plus software-based tone control, loudness, and limiting for set-and-forget operation. An auxiliary line level input is provided to accept an external audio source, such as a wireless microphone.



Input Selection Buttons
Easy input selection with corresponding LED illumination

Software-based Tone and Dynamics
Treble, bass, loudness, and limiter settings can be controlled via RS-232 to tailor the audio to the needs of the acoustic environment

Configuration Port
Allows for configuration via the front panel

Voice Level Control
Sets the level of a wireless microphone mixed with the audio from the A/V sources

Autoswitching
Simplifies operation by automatically switching to active source

Integrated Amplifier
For stereo or dual mono operation providing 13 watts rms per channel into 4 ohms, 7 watts rms per channel into 8 ohms

Two RGB Inputs
Accepts up to two VGA-UXGA computer video and stereo audio signals from PVT Series RGB transmitters

Remote Volume Control
Compatible with Extron VCM - Volume Control Module series

Two Video Inputs
Accepts up to two composite video and stereo audio signals from PVT Series composite video transmitters

Video and VGA Outputs
For sending computer-video and composite video signals to a projector

Wireless Microphone Ready
This line-level port accepts a signal from a wireless microphone to amplify the teacher's voice

Control Port
Compatible with MediaLink Controller for input switching and volume control via RS-232 and hardwired IR

Dual Mono/Stereo Mode Selector
Easily select the audio mode that best meets the needs of the environment

SWITCHER FEATURES

- Available exclusively as part of a PoleVault System
- Receives VGA computer video, composite video, and stereo audio signals from PVT Series A/V input wallplates
- Receives audio/video signals and provides transmitter power over CAT 5-type UTP cable
- Controllable via MediaLink Controller or front panel buttons
- Auxiliary audio input accepts line level audio signals from a wireless microphone for mixing with any of the four switchable inputs
- Remote control capabilities for volume via RS-232 or Extron VCM Series Volume and Mute Controller
- Software-based tone and dynamics for audio to meet the needs of the acoustic environment
- Autoswitching mode for automatic signal routing
- LED power indicator
- External power supply included

System Components

INCLUDED PRODUCTS

Each PoleVault System product is designed and manufactured by Extron, ensuring that they will work together and function properly as a system. Each of the standard PoleVault Systems includes over 15 separate components, including a twisted pair switcher/receiver, two to four video inputs, a MediaLink Controller, projector mounting hardware, speakers, and cables. The following two pages provide an overview of the standard transmitters, controller, speakers, and projector mounting hardware included in each system. See page 12 for optional products used to customize PoleVault Systems.

A/V INPUT WALL PLATES

PVT RGB MK
PoleVault VGA Video with Stereo Audio Input - MK Wallplate

- Transmits VGA computer video and stereo audio signals to a PVS 204SA switcher
- Signals are sent over two CAT 5 UTP cables that connect on spring force wire connectors
- Features IR pass-through port for source control
- Designed for mounting in a 47 mm deep, one-gang MK Electric type British Standard electrical wall box

PVT RGB CV MK
PoleVault VGA and Composite Video with Stereo Audio Input - MK Wallplate

- Transmits VGA computer video, composite video, and stereo audio signals to a PVS 204SA switcher
- Signals are sent over three CAT 5 UTP cables that connect on spring force wire connectors
- Two-input model
- Designed for mounting in a 47 mm deep, two-gang MK Electric type British Standard electrical wall box

SPEAKERS

SI 3
Compact Full-Range Surface Mount Speakers

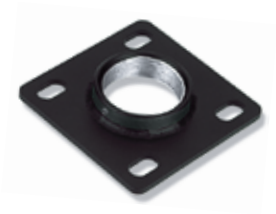
- **Surface mount speakers** for wall mounting on each side of the screen
- 7.6 cm (3") full-range driver with a tuned bass reflex port
- Exclusive V-Lock® mounting system included
- Grille and enclosure can be painted to match environment

CONTROLLER

MLC 104 IP Plus
MediaLink Controller with IP Link

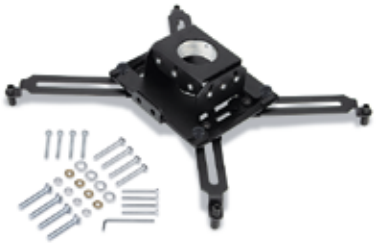
- Two bidirectional RS-232 ports for display and switcher control
- IPLink® **Network monitoring and control**
- Front panel security lockout
- Configurable tricolor backlit buttons
- Volume control with indicators
- Support for optional IRCM control modules

MOUNTING HARDWARE



FCMP 44
Flat Ceiling Mounting Plate

- Included in PoleVault System
- 10.2 cm square, low profile mounting plate
- Provides a ceiling mounting point for any Extron PMP Series Projector Mounting Pole
- Enables hard deck mounting of projector
- Dimensions: 1.7 cm H x 10.2 cm W x 10.2 cm D (0.7" H x 4.0" W x 4.0" D)
- Available in black



UPB 25
Universal Projector Bracket

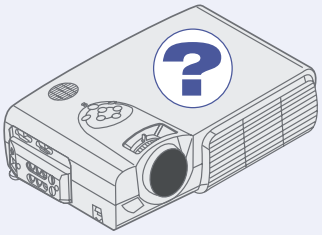
- Included in PoleVault System
- Universal projector mount compatible with nearly every projector up to 11 kg (25 lbs)
- Independent adjustments of horizontal tilt or roll, vertical angle or pitch, and rotation or yaw
- Precise positioning adjustments are maintained even if projector is removed for service
- Built-in security tabs to prevent theft
- Projector mounting hardware included for attaching projectors to the UPB 25
- Optional security hardware, part # 70-555-01
- Available in black or white

PMP Series
Projector Mount Poles

- Attaches ceiling mount to the UPB 25 Universal Projector Bracket
- The PMP 12, 30 cm (12") is included in PoleVault System; the PMP 6, 15 cm (6") or PMP 10, 25 cm (10") may be substituted
- Used with Extron UPB 25, FCMP 44, and other accessories to create individualized installations
- 4 cm W x 4.4 cm H (1.6" W x 1.75" H) cutout provides convenient cable access
- Available in black or white

PMK 350
Low Profile Pole Mount Kit for Multiple Products

- Included in PoleVault System
- Securely mounts and conceals multiple products in varied configurations above the display device
- Accommodates the PVS 204SA Plus PoleVault Switcher, power supply, and all Extron quarter rack products such as VersaTools® and IP Link models
- Low profile requires 5.0 cm (2") of height between projector and ceiling
- Dimensions: 5.0 cm H x 34.5 cm W x 29.0 cm D (2.0" H x 13.6" W x 11.4" D)
- Available in black or white



Selecting A Projector For PoleVault Systems

PoleVault Systems work with virtually any projector. However, in order to enable the full benefits of system control and network monitoring, it is important to select a projector that includes the following features:

RS-232 Control Port with Bi-Directional Communication - Many projectors provide only IR control or unidirectional RS-232. Bidirectional RS-232 allows a projector to both receive commands and provide status feedback to the control system. This capability is important for transmitting information about the projector to the GlobalViewer Web application via the controller's IP Link technology.

Communication During Standby Mode - Some projectors do not have the ability to communicate with a control system while in standby mode. In order to fully utilize the security features in IP Link technology, such as the detection of a projector that has been disconnected, it is important to select a projector that can communicate during standby mode.

Rich Set of Monitoring Commands - The more data available from the projector via RS-232, the better. Examples of useful data include: lamp hours, temperature, filter status, current input selected, projector on/off, video mute status, etc.

Brightness - A projector of at least 2000 ANSI lumens is recommended in order to provide good visibility in brightly lit rooms.

For more information, contact an Extron System Design and Support Specialist.

System Components

OPTIONAL PRODUCTS

PoleVault Systems can be customized to meet the specific requirements of the room. A wide range of options is available, including optional controller models, additional A/V inputs, speakers, mounting hardware, and more. For example, users can specify an additional pair of speakers, add microphone support, select optional mounting hardware, and specify black components, rather than the standard white color. The following two pages provide details on just a few of the options available. Extron System Design and Support Specialists are standing by to assist with any PoleVault System design and customization.

OPTIONAL A/V INPUTS

PVT RGB
PoleVault VGA Computer Video and Stereo Audio Input

- Transmits high resolution VGA computer video and stereo audio signals to a PVS 204SA switcher over two CAT 5 UTP cables
- VGA video input on a female 15-pin HD connector and audio input on a 3.5 mm stereo mini jack
- Local monitor output
- Rack-mountable, 1U, quarter rack width metal enclosure

PVT RGB CV
PoleVault VGA Computer Video, Composite Video, and Stereo Audio Input

- Transmits VGA, composite video, and stereo audio signals to a PVS 204SA switcher over three CAT 5 UTP cables
- Two-input model accepts composite video with audio on female RCA jacks and VGA on a female 15-pin HD connector with audio on a 3.5 mm stereo mini jack
- Rack-mountable, 1U, quarter rack width metal enclosure

PVT SW RGB
Dual PoleVault VGA Computer Video and Stereo Audio Input with Integrated Switcher

- Increases the quantity of high resolution video inputs allowed in a PoleVault System
- Transmits VGA computer video and stereo audio signals to a PVS 204SA switcher over two CAT 5 UTP cables
- Two VGA video inputs on female 15-pin HD connectors and two audio inputs on 3.5 mm stereo mini jacks

A/V INPUT

PVT CV
Composite Video and Stereo Audio Input

- Transmits composite video and stereo audio signals to a PVS 204SA switcher over a single CAT 5 UTP cable
- Composite video and stereo audio input on female RCA connectors
- Rack-mountable, 1U, one-eighth rack width metal enclosure

OPTIONAL CONTROLLERS

MLC 104 IP Plus L
MediaLink Controller with IP Link and Lectern Faceplate

- Adds low-profile faceplate for mounting in a lectern or MLM-WB+ Wall Box
- Two bidirectional RS-232 ports for display and switcher control
- IPLink **Network monitoring and control**
- Front panel security lockout
- Configurable tricolor backlit buttons
- Volume control with indicators

MLC 104 IP Plus DV+
MediaLink Controller with IP Link and Integrated DVD and VCR IR Control

- Adds dual-function DVD and VCR IR control
- Two bidirectional RS-232 ports for display and switcher control
- IPLink **Network monitoring and control**
- Front panel security lockout
- Configurable tricolor backlit buttons
- Volume control with indicators

OPTIONAL SPEAKERS

SI 26X
Two-Way Open Back Ceiling Speakers

- **Non-plenum ceiling speakers** for low-cost applications
- Open back, infinite baffle design
- 16.5 cm (6.5") long-throw woofer
- 1.9 cm (0.75") pivoting ferrofluid-cooled, titanium-coated dome tweeter

SI 26
Compact Full-Range Surface Mount Speakers

- **Surface mount speakers** for wall mounting on each side of the screen
- 2.5 cm (1") ferrofluid-cooled, aluminum dome tweeter
- 16.5 cm (6.5") long-throw woofer with dual tuned bass reflex ports
- Exclusive V-Lock® mounting system included
- Grille and enclosure can be painted to match environment

MICROPHONE INPUT

MLP 101 D
MLP - Mic to Line Preamplifier

- Microphone preamp allows wired microphone to be connected to the PoleVault switcher
- Precise mic input gain adjustment from +25 to +72 dB
- Mounts in an included Decora-style faceplate and optional EWB 101 External Wall Box

PA SYSTEM MUTING

PPC 25
Priority Page Controller

- Detects audio signal in a PA system speaker and mutes program audio, ensuring that important announcements are heard
- Works with the audio mute functionality in the PVS 204 SA PoleVault Switcher
- Compatible with 25/70 volt, line level, and 4/8 ohm public address systems
- Adjustable time delay from 1 to 10 seconds for restoring audio after a page

OPTIONAL MOUNTING HARDWARE

ACMP 100
Angled Ceiling Mounting Plate

- Alternative to the FCMP 44
- Pivoting angled ceiling mounting plate
- Enables projector to hang level from angled ceilings
- Compatible with Extron PMP Series Projector Mount Poles
- Available in black

PCM 240
Projector Drop Ceiling Mount

- Alternative to the FCMP 44
- Projector drop ceiling mount for use with suspended ceilings
- Includes knockout openings for junction boxes — RACO #8471 recommended — or for use as cable pass-throughs
- Dimensions: 3.0 cm H x 65.5 cm W x 20.3 cm D (1.2" H x 25.8" W x 8.0" D)
- Available in white

System Components

GRAPHICAL USER INTERFACE

Source Selection Buttons
Buttons can be custom-labeled with user defined text

Logo Graphics
Insert your full color school or department logo here

Display Power On/Off
Control your display power, plus up to two additional functions

Room Name
The classroom description is automatically displayed from Global Configurator setup

One of three free templates that can be downloaded from the Extron Web site

Audio Control
Simple push button control of audio volume and mute functions

Online Help
Provides fast access to user-created online information about operating the presentation system

Extron's graphical user interfaces, or GUIs, are functional, intuitive, and easy to use. The integrated IP Link Web server in the MLC 104 IP Plus controller makes adding a high-quality, customized user interface easy and enables control from any networked PC or laptop using either a mouse or touch-monitor in the room. Your AV/IT facility support team will still be able to provide remote interactive support for all users from within the FREE GlobalViewer Web application. Extron offers two ways to create a custom GUI for your installation:

Download FREE Templates and Do It Yourself

Our FREE user interface software development kit, designed for end users who are comfortable modifying HTML and JavaScript, includes modifiable templates that can be downloaded from the Extron Web site at www.extron.com/gui

GUI Customization Service

It is easy to order a custom GUI for your organization. Simply contact an Extron Customer Support Representative and describe your requirements. Our developers will create a custom GUI according to your specifications for a small fee.

POLEVAULT SYSTEMS ARE EASY TO CUSTOMIZE

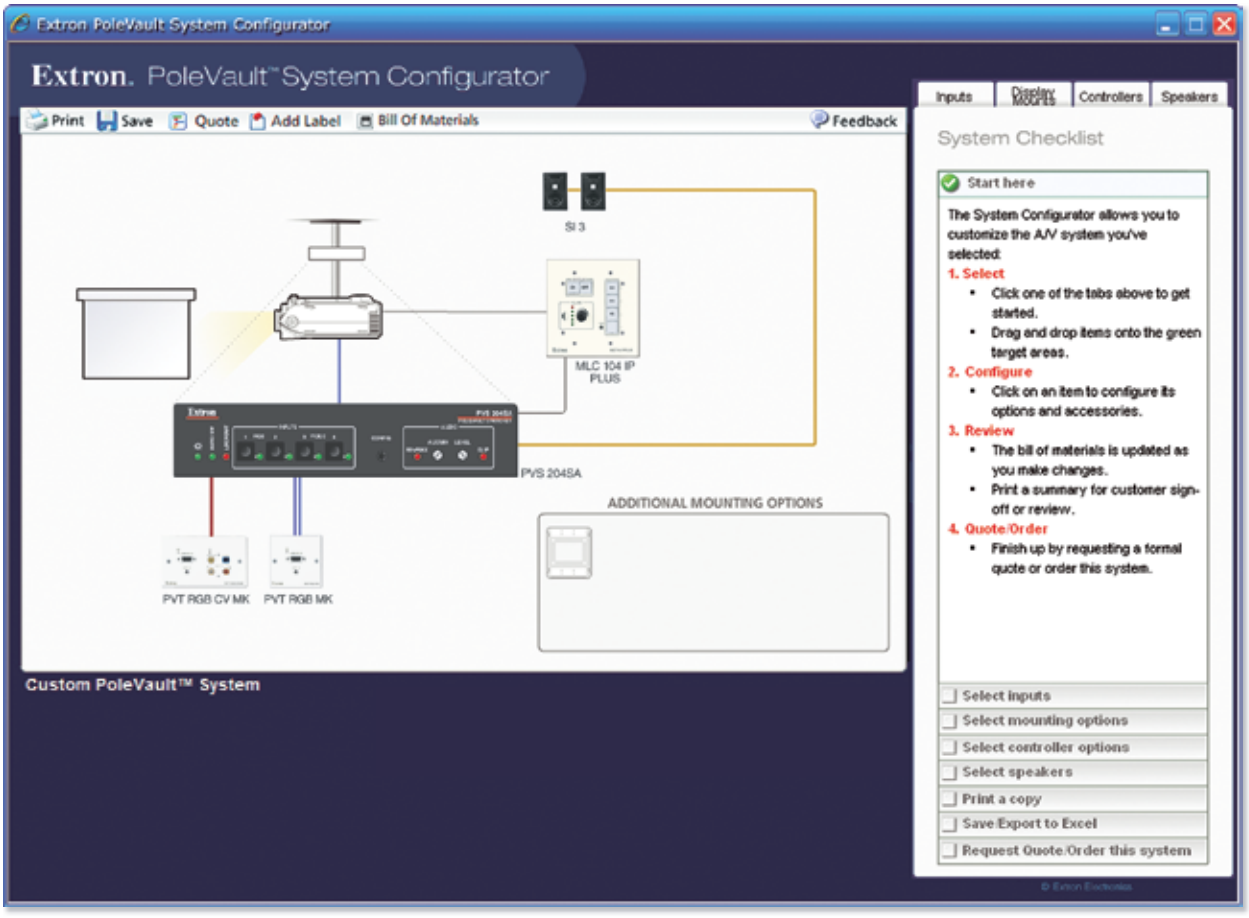
There are three standard PoleVault System packages that streamline the design and procurement process. These two-, three-, and four-input packages include all the necessary audio and video switching, audio amplification, system control, source connectivity, speakers, mounting hardware, and cabling for a complete classroom A/V solution. All that remains is to add the video projector, projection screen, and sources.

Extron PoleVault Systems take their name from the unique PMK 350 Low Profile Pole Mount Kit that securely mounts and conceals the system audio and video switching and audio amplification components mounted above the projector. This provides tamper-resistant theft deterrence for the A/V system.

System Customization

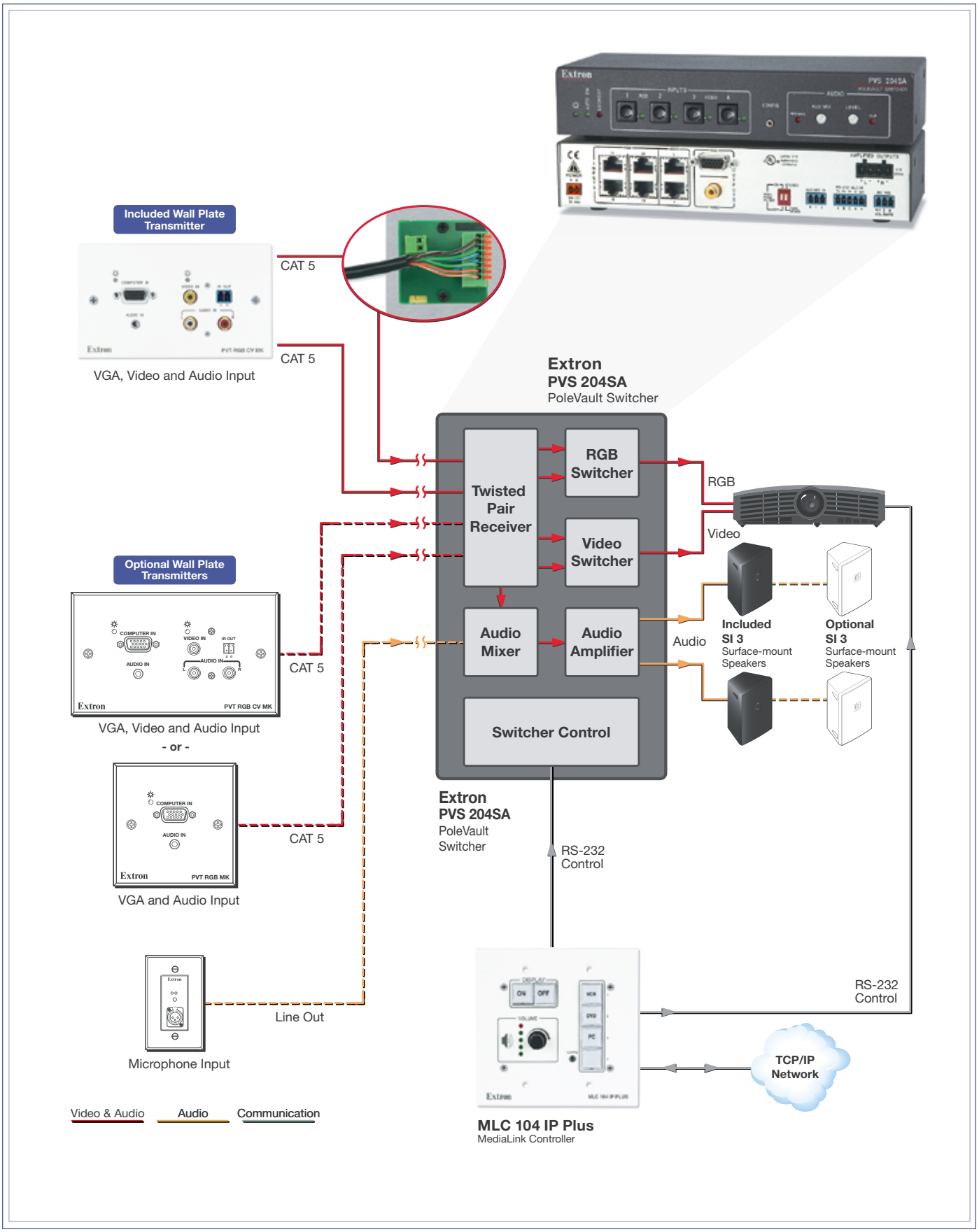
All PoleVault Systems can be customized to meet specific classroom requirements. Each customized system must always include the PVS 204SA Plus PoleVault Switcher - which is available only in a PoleVault System - a PMK 350, System Integrator® speakers, and one to three A/V input wallplates.

The PoleVault System Configurator at www.extron.com/pvsc is an online, drag-and-drop configuration utility that allows users to design PoleVault systems using the Extron Web site. The dynamic, graphical user interface makes system customization easy. Only the available choices are shown as you build your system. Helpful wizards ensure that only valid systems are built and vital accessories are included. In each standard system, certain components can be changed. For example, users can specify an additional pair of speakers, add wall plates, add or remove optional mounting hardware, and select component colors. A wide range of options are available. The PoleVault System Configurator can also be used to print or save an equipment list and submit a request for quote to Extron Sales. Extron System Design and Support Specialists are standing by to assist with any PoleVault System design and customization.

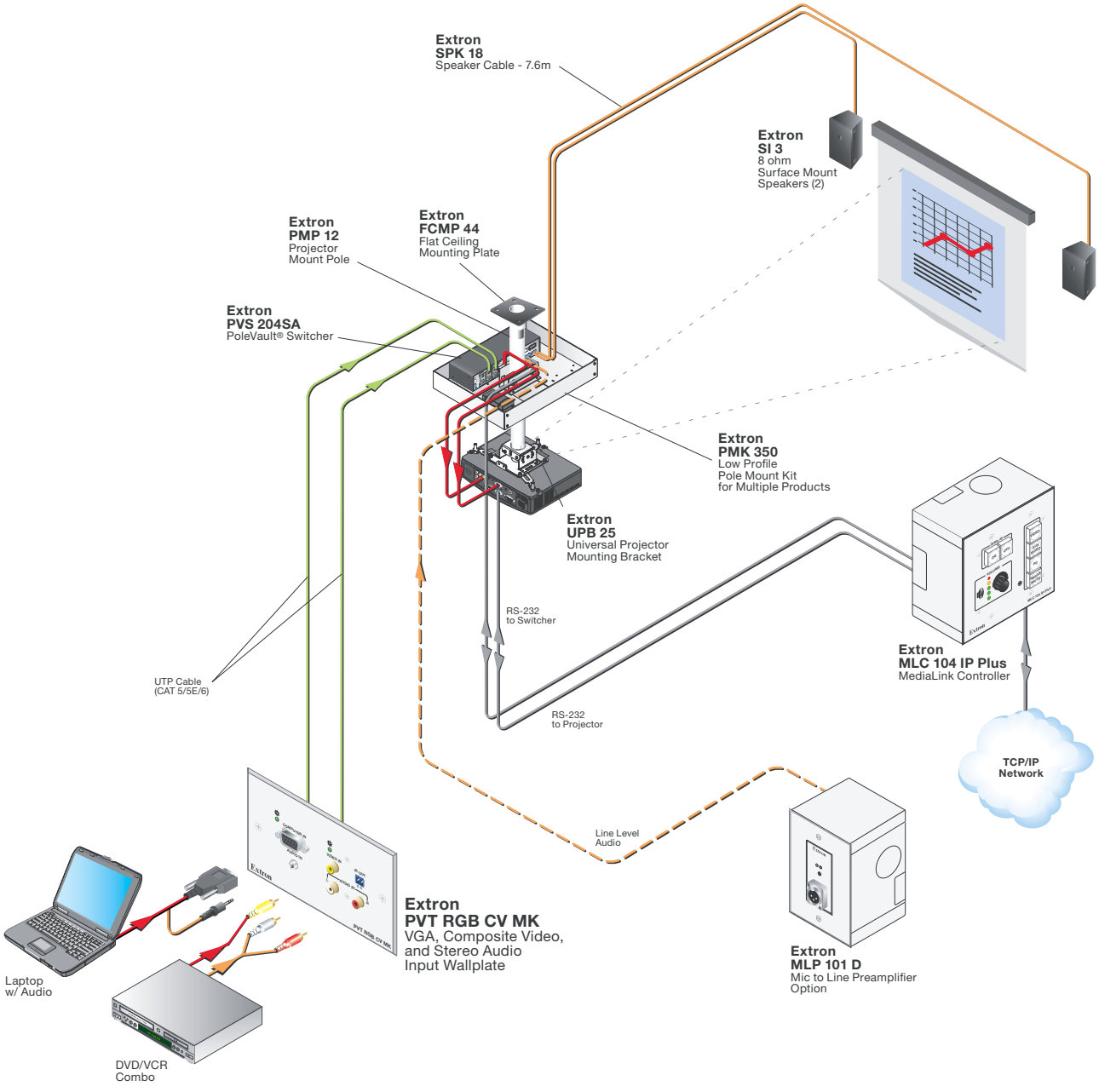


PoleVault System Configurator

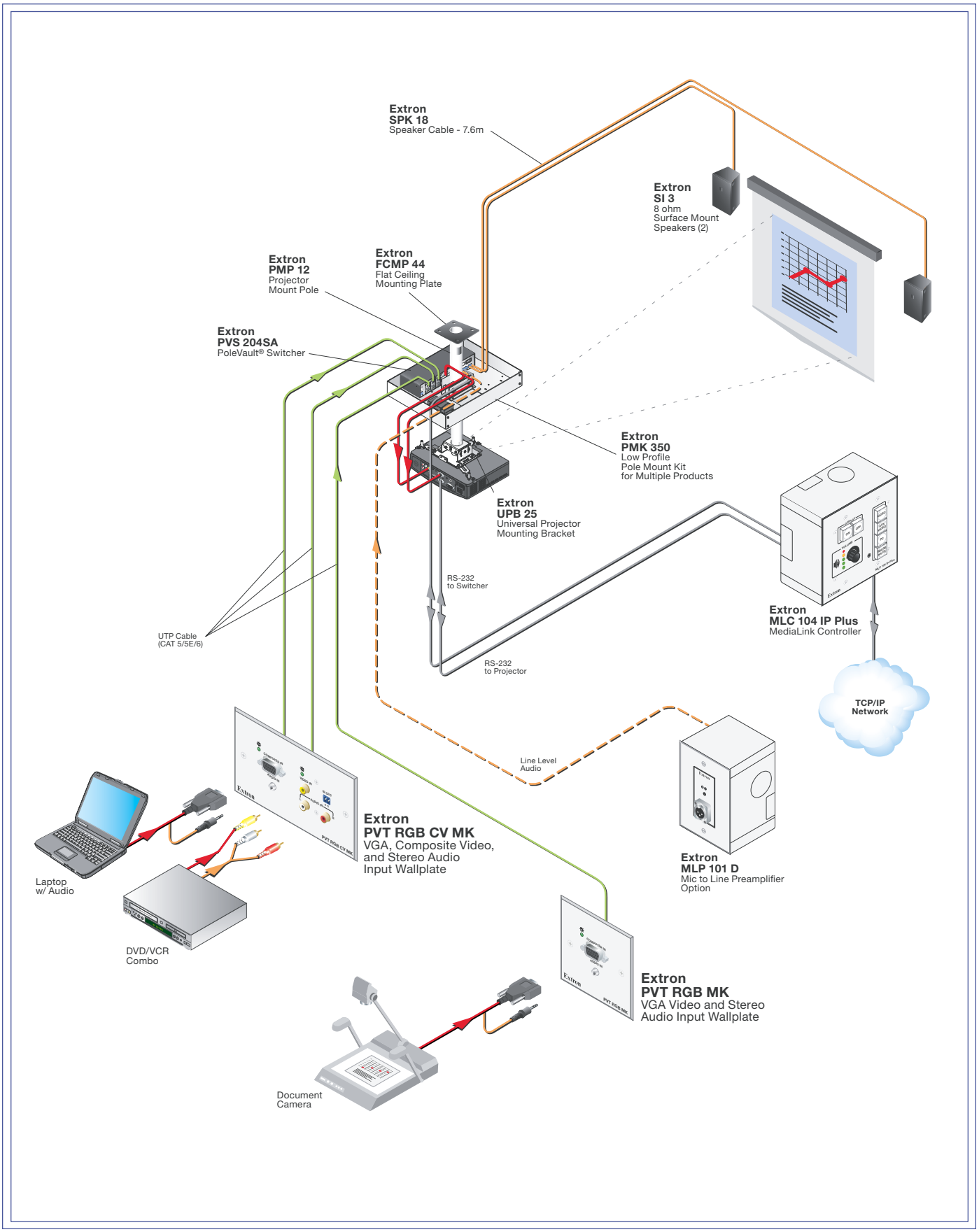
Block Diagram



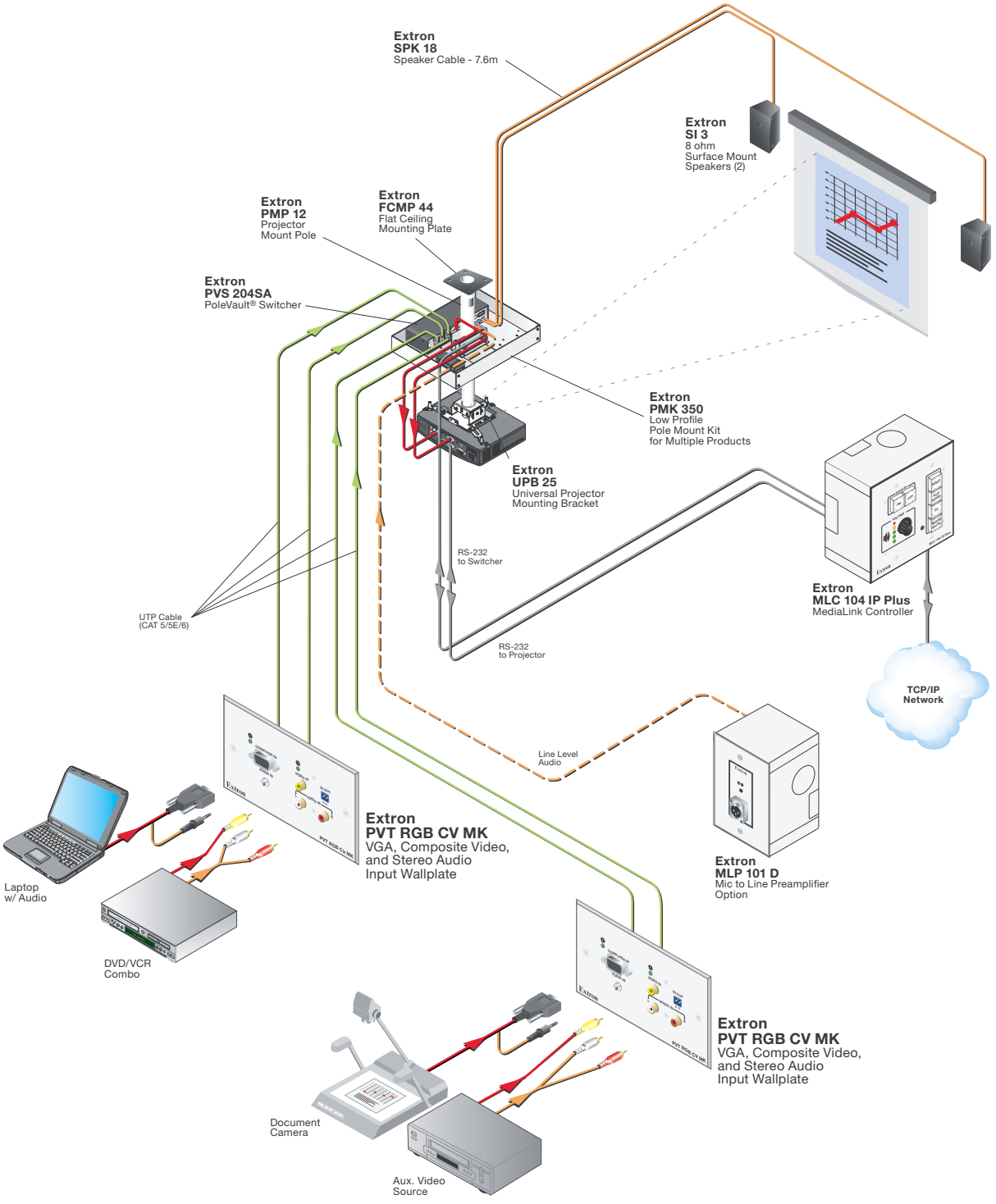
PVS 202 - Two Input PoleVault® System



PVS 302 - Three Input PoleVault® System



PVS 402 - Four Input PoleVault® System



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